

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. – 20. (Cancelled)

21. (Currently Amended) A chimeric polypeptide comprising ~~the polypeptide of claim 17 linked with another polypeptide~~ two or more antigenic polypeptide fragments of a polypeptide consisting of the amino acid sequence set forth in SEQ ID NO:2, wherein the two or more antigenic polypeptide fragments each comprise at least 15 contiguous amino acids of SEQ ID NO:2 and are linked so as to form an immunogenic chimeric polypeptide, wherein the chimeric polypeptide elicits an antibody that specifically binds to the polypeptide that consists of the amino acid sequence set forth as SEQ ID NO:2.

22. (Cancelled)

23. (Currently Amended) A pharmaceutical composition comprising ~~the polypeptide of claim 17 and a pharmaceutically acceptable carrier, diluent or adjuvant~~ and an isolated polypeptide that consists of an amino acid sequence at least 90% identical to the amino acid sequence set forth as SEQ ID NO:2, wherein the isolated polypeptide elicits an antibody that specifically binds to a polypeptide that consists of the amino acid sequence set forth as SEQ ID NO:2.

24. (Previously Presented) A pharmaceutical composition comprising the chimeric polypeptide of claim 21 and a pharmaceutically acceptable carrier, diluent or adjuvant.

25. (Previously Presented) A method for prophylactic or therapeutic treatment of *S. pyogenes* infection in a host susceptible to *S. pyogenes* infection comprising administering to said host a prophylactic or therapeutic amount of the composition according to claim 23.

26. (Previously Presented) The method according to claim 25 wherein the host is a neonate, an infant, a child, an immunocompromised host, an adult, or an elderly person.

27. – 29. (Cancelled)

30. (Previously Presented) A method for prophylactic or therapeutic treatment of S. pyogenes infection in a host susceptible to S. pyogenes infection comprising administering to said host a prophylactic or therapeutic amount of the composition according to claim 24.

31. (Currently Amended) ~~A The method for prophylactic or therapeutic treatment of infections in a host, including according to claim 25 wherein the *S. pyogenes* infection is pharyngitis, erysipelas, impetigo, scarlet fever, and invasive diseases such as bacteremia, and or necrotizing fasciitis comprising administering to said host a therapeutic or prophylactic amount of a composition according to claim 23.~~

32. (Currently Amended) A method for diagnosis of *S. pyogenes* infection in a host susceptible to *S. pyogenes* infection comprising:

- a) obtaining a biological sample from the host;
- b) incubating an antibody or antigen-binding fragment thereof ~~reactive with the polypeptide according to claim 17 that specifically binds to a polypeptide consisting of the amino acid sequence set forth as SEQ ID NO:2~~ with the biological sample to form a mixture; and
- c) detecting specifically bound antibody or bound antigen-binding fragment in the mixture which indicates the presence of *S. pyogenes* in the host.

33. (Currently Amended) A method for the detection of antibody specific to *S. pyogenes* antigen in a biological sample containing or suspected of containing said antibody comprising

a) obtaining the biological sample from a host;

b) incubating ~~one or more polypeptides according to claim 17 with the biological sample~~ with an isolated polypeptide to form a mixture, wherein the isolated polypeptide is selected from (i) an isolated polypeptide that consists of an amino acid sequence at least 90% identical to the amino acid sequence set forth as SEQ ID NO:2; (ii) an isolated polypeptide that comprises an amino acid sequence at least 95% identical to the amino acid sequence set forth as SEQ ID NO:2; and (iii) an isolated polypeptide that comprises the amino acid sequence set forth as SEQ ID NO:2, wherein the isolated polypeptide is capable of eliciting an antibody that specifically binds to a polypeptide consisting of the amino acid sequence set forth as SEQ ID NO:2; and

c) detecting specifically bound ~~antigen or bound fragment~~ polypeptide in the mixture which indicates the presence of antibody specific to *S. pyogenes* in the sample.

34. – 35. (Cancelled)

36. (Currently Amended) ~~Kit A kit comprising an isolated polypeptide the polypeptide according to claim 17 for detection or diagnosis of *S. pyogenes* infection, wherein the isolated polypeptide is selected from (a) an isolated polypeptide that consists of an amino acid sequence at least 90% identical to the amino acid sequence set forth as SEQ ID NO:2; (b) an isolated polypeptide that comprises an amino acid sequence at least 95% identical to the amino acid sequence set forth as SEQ ID NO:2; and (c) an isolated polypeptide that comprises the amino acid sequence set forth as SEQ ID NO:2, wherein the isolated polypeptide is capable of eliciting an antibody that specifically binds to a polypeptide consisting of the amino acid sequence set forth as SEQ ID NO:2.~~

37. (Currently Amended) ~~Kit-A kit~~ comprising the chimeric polypeptide according to either claim 21 or claim 42 for detection or diagnosis of *S. pyogenes* infection.

38. (New) The pharmaceutical composition of claim 23 wherein the isolated polypeptide consists of an amino acid sequence at least 95% identical to the amino acid sequence set forth as SEQ ID NO:2.

39. (New) The pharmaceutical composition of claim 23 wherein the isolated polypeptide consists of the amino acid sequence set forth as SEQ ID NO:2.

40. (New) A pharmaceutical composition comprising a pharmaceutically acceptable carrier, diluent or adjuvant and an isolated polypeptide that comprises an amino acid sequence at least 95% identical to the amino acid sequence set forth as SEQ ID NO:2, wherein the polypeptide elicits an antibody that specifically binds to a polypeptide that consists of the amino acid sequence set forth as SEQ ID NO:2.

41. (New) The pharmaceutical composition of claim 40 wherein the isolated polypeptide comprises the amino acid sequence set forth as SEQ ID NO:2.

42. (New) A chimeric polypeptide comprising a polypeptide consisting of an amino acid sequence at least 90% identical with the amino acid sequence set forth as SEQ ID NO:2, or an antigenic fragment of the polypeptide, wherein the antigenic fragment consists of at least 15 contiguous amino acids of SEQ ID NO:2, and wherein the chimeric polypeptide elicits an antibody that specifically binds to a polypeptide that consists of the amino acid sequence set forth as SEQ ID NO:2.

43. (New) A pharmaceutical composition comprising a pharmaceutically acceptable carrier, diluent or adjuvant and the chimeric polypeptide of claim 42.

44. (New) A method for inducing an immune response against *S. pyogenes* in a host, said method comprising administering to the host the composition according to any one of claims 23 and 38-41.

45. (New) A method for inducing an immune response against *S. pyogenes* in a host, said method comprising administering to the host the composition according to either claim 24 or claim 43.

46. (New) A method for prophylactic or therapeutic treatment of *S. pyogenes* infection in a host susceptible to *S. pyogenes* infection comprising administering to said host a prophylactic or therapeutic amount of the composition according to any one of claims 38-41.

47. (New) The method according to claim 46 wherein the *S. pyogenes* infection is pharyngitis, erysipelas, impetigo, scarlet fever, bacteremia, or necrotizing fasciitis.

48. (New) A method for prophylactic or therapeutic treatment of *S. pyogenes* infection in a host susceptible to *S. pyogenes* infection comprising administering to said host a prophylactic or therapeutic amount of the composition according to claim 43.